

**REMARKS**

In the Office Action mailed October 30, 2007, the Examiner noted that claims 1-17 and 19-38 were pending; rejected claims 1-3, 10, 11, 14-17, 19, 21, 22, 24-29, 32, 37 and 38 under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al. (U.S. Patent No. 6,314,064) in view of Hayashi et al. (U.S. Patent No. 6,775,065); rejected claims 4, 6, 7, 9 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al.; rejected claims 5, 8, 12, 13, 30 and 31 under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al. and Hayashi et al. in view of Nagashima et al. (U.S. Patent No. 6,304,526); rejected claim 20 under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al. and Hayashi et al. in further view of Applicant's Background of the Invention (hereinafter "Background"); and rejected claims 33-36 under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al. in view of Choi (U.S. Publication No. 2002/0054559). Claims 4, 5, 7, 12 and 22 are cancelled. Thus, claims 1-3, 6, 8-11, 13-17, 19-21 and 23-38 are currently pending. The rejections are traversed below.

**Rejections under 35 U.S.C. § 103**

Claims 1-3, 10, 11, 14-17, 19, 21, 22, 24-29, 32, 37 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al. (U.S. Patent No. 6,314,064) in view of Hayashi et al. (U.S. Patent No. 6,775,065).

Claim 1 is amended herein to substantially recite the features of claims 4 and 5. Claims 17 and 33 are amended to recite somewhat similar features. The Applicant respectfully submits that the cited art fails to teach or suggest these features.

Amended claim 1 recites "a basic separating distance of the one objective lens relative to the corresponding one of the first through third recording media is  $WD1 + \alpha$ , and  $\alpha = |WD2 - WD1| \times (0.1 \sim 1.0)$ " (lines 36 and 37). In rejecting claim 4, the Office Action stated that this feature was obvious over Ueda et al. The Applicant respectfully disagrees.

The Office Action states on pages 8 and 9 that:

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to obtain the above values through routine experimentation and optimization in the absence of criticality. Thus, it is not inventive to discover the optimum or workable ranges by routing [sic] experimentation (*In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955)).

However, the Applicant does not believe that *In re Aller* is applicable here. MPEP § 2144.05(II)(A) states that "[g]enerally, differences in concentration or temperature will not

support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical." *In re Aller* dealt with ranges for a temperature and an acid concentration (see *Id.*). In this case, the above feature is an equation that determines "a basic separating distance of the one objective lens relative to the corresponding one of the first through third recording media". This separating distance is neither a concentration nor a temperature.

Rather, the instance case is more analogous to *In re Antonie*, 559 F.2d 618 (CCPA 1977). In that case, the court held that:

[A] wastewater treatment device had a tank volume to contractor area of 0.12 gal./sq. ft. The prior art did not recognize the treatment capacity is a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result-effective variable.

(MPEP § 2144.05(II)(B)). The Applicant respectfully submits that similar to *In re Antonie*, *Ueda et al.* fails to recognize a "separating distance" as a result-effective variable. Nowhere in *Ueda et al.* is the above equation found and the Applicant does not find any analogous equation that governs separating distance. As such, there appears to be no recognition in *Ueda et al.* that separating distance is a result-effective variable. Further, *Ueda et al.* gives no guidance as to how such separation distance would be determined. As such, *Ueda et al.* fails to teach separating distance in such a way that would allow a person of ordinary skill in the art to achieve the recitations of amended claim 1 through experimentation.

Amended claim 1 also recites that "at least one of the first and second objective lenses is formed so that a wavefront aberration occurring mainly due to a tilt of the objective lens and a wavefront aberration occurring mainly due to a tilt of light incident on the objective lens become a same type of aberration" (last four lines). In rejecting claim 5, the Office Action states that *Ueda et al.* and *Hayashi et al.* "do not disclose" these features (see pages 9 and 10). Rather, the Office Action states that column 5, lines 5-24 of *Nagashima et al.* teach these features. The Applicant respectfully disagrees.

*Nagashima et al.* discusses decreasing "coma aberration of a spot light on various optical recording media" (column 5, lines 5 and 6).

[T]he first and second object lenses satisfy two conditions that  $|L_{t1}| > |L_{t2}|$  and  $|L_{b1}| > |L_{b2}|$  wherein  $L_{t1}$  and  $L_{t2}$  denote third order coma aberration components of wave front aberration that change when angles of optical axes of the first and second objective lenses are varied by unit angle, respectively, and  $L_{b1}$  and  $L_{b2}$  denote third order coma aberration components of wave front aberration that change when angles of incident light beams for the first and second objective lenses are varied by a unit angle, respectively.

(Column 5, lines 6-21, of Nagashima et al.). “[T]he kind of the optical recording medium is detected, and an appropriate object lens in the two object lenses is selected” (column 5, lines 22-24, of Nagashima et al.).

While Nagashima et al. discusses “third order coma aberration components of wave front aberration” that change when “angles of optical axes of the first and second objective lenses are varied by unit angle” and “when angles of incident light beams for the first and second objective lenses are varied by a unit angle”, Nagashima et al. does not discuss that these become “a same type of aberration”. Rather, Nagashima et al. merely discusses that “third order coma aberration components of wave front aberration” change under the above conditions. Thus, Nagashima et al. fails to teach or suggest the above features of amended claim 1.

Claims 2, 3, 10, 11, 14-16, 19, 21, 24-29, 32, 37 and 38 depend from claim 1, 17 or 33 and add further features thereto. Thus, the arguments above with respect to claim 1 also apply to these claims.

Claim 22 is cancelled.

For at least the reasons above, it is respectfully submitted that the rejection is overcome.

Claims 4, 6, 7, 9 and 23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al.

Claims 4 and 7 are cancelled.

Claims 6, 9 and 23 depend from claims 1 or 17 and add further features thereto. Thus, the arguments above with respect to claim 1 also apply to these claims.

For at least the reasons above, it is respectfully submitted that the rejection is overcome.

Claims 5, 8, 12, 13, 30 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al. and Hayashi et al. in view of Nagashima et al. (U.S. Patent No. 6,304,526).

Claims 5 and 12 are cancelled.

Claims 8, 13, 30 and 31 depend from claim 1 or 17 and add further features thereto. Per the above, Nagashima et al. does not teach the features of cancelled claim 5 that have been amended into claim 1. Thus, the arguments above with respect to claim 1 also apply to these claims.

For at least the reasons above, it is respectfully submitted that the rejection is overcome.

Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al. and Hayashi et al. in further view of Background.

Claim 20 depends from claim 17 and adds further features thereto. Nothing is cited or found in Background that overcomes the deficiencies of Ueda et al. and Hayashi et al. discussed above with respect to claim 1. Thus, the arguments above with respect to claim 1 also apply to claim 20.

For at least the reasons above, it is respectfully submitted that the rejection is overcome.

Claims 33-36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ueda et al. in view of Choi (U.S. Publication No. 2002/0054559).

Claim 33 is amended to recite somewhat similar features to cancelled claims 4 and 5. Nothing is cited or found in Choi that overcomes the deficiencies of Ueda et al. and Hayashi et al. discussed above with respect to claim 1. Thus, the arguments above with respect to claim 1 also apply to claim 33.

For at least the reasons above, it is respectfully submitted that the rejection is overcome.

### Summary

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: 1-30-2008

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